

AMENDMENTS TO THE SPECIFICATION

Please add the following priority statement on page 1, just after the title and before the first line of the specification:

-- This application is the National Stage of PCT/DE99/03506, filed November 3, 1999. --

On page 8, please replace the paragraph beginning at line 17 with the following amended paragraph:

--**Figure 3** ~~(SEQ ID NOS: 3-10)~~ shows the conservation of the amino acid sequence between various HBV subtypes as well as the ~~hydropathy profile~~ profiles of the HBV subtypes. FIG. 3A (top) provides a table of nucleotide sequences, amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2-TLM peptide of HBV subtype ayw (1) (SEQ ID NO: 2) compared to subtypes ayw (2) (SEQ ID NO: 4), adr (1) / adr (2) / ayr (SEQ ID NO: 6), and adw / adw2 (SEQ ID NO: 8); the amino acid residues and hydropathy values of SEQ ID NO: 2 are shown in bold face, as are the amino acid residues and hydropathy values of SEQ ID NOS: 4, 6, and 8 that are identical to the corresponding residues in SEQ ID NO: 2; panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 4 (in black) compared to SEQ ID NO: 2 (in grey). In FIG. 3B, panel (b) graphically depicts the hydropathy profile of SEQ ID NO: 6 (in black) compared to SEQ ID NO: 2 (in grey), and panel (c) graphically depicts the hydropathy profile of SEQ ID NO: 8 (in black) compared to SEQ ID NO: 2 (in grey). In the graphs of FIG. 3A and 3B, the hydropathy values of the amino acid side chains are plotted on the y-axis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

On page 8, please replace the paragraph beginning at line 20 with the following amended paragraph:

--**Figure 4** (~~SEQ ID NOS: 11-16~~) shows amphiphilic ~~motives~~ motifs in the PreS2 region of various avian hepadnaviruses. FIG. 4A (top) provides a table of amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2 region HBV subtype ayw (1) (SEQ ID NO: 2) compared to DHBV residues 20-31 (SEQ ID NO: 9), DHBV residues 42-53 (SEQ ID NO: 10), and HHBV residues 45-56 (SEQ ID NO: 11); panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 9 (in black) compared to SEQ ID NO: 2 (in grey). In FIG. 4B, panel (b) graphically depicts the hydropathy profile of SEQ ID NO: 10 (in black) compared to SEQ ID NO: 2 (in grey), and panel (c) graphically depicts the hydropathy profile of SEQ ID NO: 11 (in black) compared to SEQ ID NO: 2 (in grey). In the graphs of FIG. 4A and 4B, the hydropathy values of the amino acid side chains are plotted on the y-axis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

On page 8, please replace the paragraph beginning at line 22 with the following amended paragraph:

--**Figure 5** (~~SEQ ID NOS: 11-16~~) shows amphiphilic ~~motives~~ motifs in the PreS2 region of various hepadnaviruses of rodents. FIG. 5 (top) provides a table of amino acid sequences and hydropathy values (according to Kyte and Doolittle, 1982) for the PreS2 region HBV subtype ayw (1) (SEQ ID NO: 2) compared to WHV residues 33-44 (SEQ ID NO: 12) and GSHV residues 33-44 (SEQ ID NO: 13); panel (a) graphically depicts the hydropathy profile of SEQ ID NO: 13 (in white) and SEQ ID NO: 12 (in black) compared to SEQ ID NO: 2 (in grey). In the graph, the hydropathy values of the amino acid side chains are plotted on the y-axis and the 12 amino acid residues of the peptides are plotted on the x-axis, with the N-terminal

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amino acid being labeled 1; hydrophobic amino acids have positive hydropathy values and hydrophilic amino acids have negative hydropathy values. --

Please amend the specification to enter the revised Sequence Listing submitted herewith.